



<110> HOLMGREN, Lars
TROYANOVSKY, Boris

<120> ANGIOGENESIS RELATED MOLECULES

<130> 0552-0154P

<140> US 10/720,273

<141> 2003-11-25

<150> US 09/332,063

<151> 1999-06-14

<150> 60/114,386

<151> 1998-12-29

<150> 60/089,266

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<151> 1998-12-17

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<170> PatentIn Ver. 2.1

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 Val Glu Ile Leu Ser Asp Glu Asn Arg Asn Leu Arg Gln Glu Leu Glu
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 Glu Asp Gln Arg Arg His Ile Glu Ile Arg Asp Gln Ala Leu Ser Asn
 160 165 170

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Asn Cys Gln Pro Thr Asn Val Ser Glu Tyr Asn Ala Ala Leu Met			
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Val Ile Ser His Ser Pro Asn Thr Ser Tyr Asp Thr Ala Leu Glu Ala			
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Thr Glu Ser Asn Lys Thr Ala Ala Val Ala Pro Ile Ser Val Pro Ala		
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Pro Val Ala Ala Ala Ala Thr Ala Ala Ile Thr Ala Thr Ala Ala		
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Lys Val Ala Arg Leu Gln Lys Val Glu Thr Glu Ile Gln Arg Val Ser
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Glu Ala Tyr Glu Asn Leu Val Lys Ser Ser Ser Lys Arg Glu Ala Leu
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Glu Lys Ala Met Arg Asn Lys Leu Glu Gly Glu Ile Arg Arg Met His
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Asp Phe Asn Arg Asp Leu Arg Glu Arg Leu Glu Thr Ala Asn Lys Gln
100 105 110

Leu Ala Glu Lys Glu Tyr Glu Gly Ser Glu Asp Thr Arg Lys Thr Ile
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Ser Gln Leu Phe Ala Lys Asn Lys Glu Ser Gln Arg Glu Lys Glu Lys
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145 150 155 160

Arg His Ile Glu Ile Arg Asp Gln Ala Leu Ser Asn Ala Gln Ala Lys
165 170 175

Val Val Lys Leu Glu Glu Glu Leu Lys Lys Gln Val Tyr Val Asp
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Lys Val Glu Lys Met Gln Gln Ala Leu Val Gln Leu Gln Ala Ala Cys
195 200 205

Glu Lys Arg Glu Gln Leu Glu His Arg Leu Arg Thr Arg Leu Glu Arg
210 215 220

Glu Leu Glu Ser Leu Arg Ile Gln Gln Arg Gln Gly Asn Cys Gln Pro
225 230 235 240

Thr Asn Val Ser Glu Tyr Asn Ala Ala Ala Leu Met Glu Leu Leu Arg
245 250 255

Glu Lys Glu Glu Arg Ile Leu Ala Leu Glu Ala Asp Met Thr Lys Trp
260 265 270

Glu Gln Lys Tyr Leu Glu Glu Asn Val Met Arg His Phe Ala Leu Asp
275 280 285

Ala Ala Ala Thr Val Ala Ala Gln Arg Asp Thr Thr Val Ile Ser His
290 295 300

Ser Pro Asn Thr Ser Tyr Asp Thr Ala Leu Glu Ala Arg Ile Gln Lys
305 310 315 320

Glu Glu Glu Glu Ile Leu Met Ala Asn Lys Arg Cys Leu Asp Met Glu
325 330 335

Gly Arg Ile Lys Thr Leu His Ala Gln Ile Ile Glu Lys Asp Ala Met
340 345 350

Ile Lys Val Leu Gln Gln Arg Ser Arg Lys Glu Pro Ser Lys Thr Glu
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Gln Leu Ser Cys Met Arg Pro Ala Lys Ser Leu Met Ser Ile Ser Asn
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Ala Gly Ser Gly Leu Leu Ser His Ser Ser Thr Leu Thr Gly Ser Pro
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Gly Ser Arg Asp Cys Ser Thr Gln Thr Glu Arg Gly Thr Glu Ser Asn
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Lys Thr Ala Ala Val Ala Pro Ile Ser Val Pro Ala Pro Val Ala Ala
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Ala Ala Thr Ala Ala Ile Thr Ala Thr Ala Ala Thr Ile Thr Thr
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Thr Met Val Ala Ala Ala Pro Val Ala Val Ala Ala Ala Ala Pro
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Ala Val Ser Pro Ala Ala Gly Gln Ile Pro Ala Ala Ala Ser Val
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Gln Val Ala Pro Ala Ala Pro Ala Pro Val Pro Ala Pro Ala Leu Val
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Gly Pro Gly Pro His Arg Leu Ser Ile Pro Ser Leu Thr Cys Asn Pro
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Asp Lys Thr Asp Gly Pro Val Phe His Ser Asn Thr Leu Glu Arg Lys
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Tyr Leu Ile
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Lys Val Ala Arg Leu Gln Lys Val Glu Thr Glu Ile Gln Arg Val Ser
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Glu Ala Tyr Glu Asn Leu Val Lys Ser Ser Ser Lys Arg Glu Ala Leu
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Glu Lys Ala Met Arg Asn Lys Leu Glu Gly Glu Ile Arg Arg Met His
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Asp Phe Asn Arg Asp Leu Arg Glu Arg Leu Glu Thr Ala Asn Lys Gln
100 105 110

Leu Ala Glu Lys Glu Tyr Glu Gly Ser Glu Asp Thr Arg Lys Thr Ile
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Ser Gln Leu Phe Ala Lys Xaa Lys Glu Ser Gln Arg Glu Lys Glu Lys
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Arg His Ile Glu Ile Arg Asp Gln Ala Leu Ser Asn Ala Gln Ala Lys
165 170 175

Val Val Lys Leu Glu Glu Leu Lys Lys Gln Val Tyr Val Asp
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Lys Val Glu Lys Met Gln Gln Ala Leu Val Gln Leu Gln Ala Ala Cys
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Glu Lys Arg Glu Gln Leu Glu His Arg Leu Arg Thr Arg Leu Glu Arg
210 215 220

Glu Leu Glu Ser Leu Arg Ile Gln Gln Arg Gln Gly Asn Cys Gln Pro
225 230 235 240

Thr Asn Val Ser Glu Tyr Asn Ala Ala Ala Leu Met Glu Leu Leu Arg
245 250 255

Glu Lys Glu Glu Arg Ile Leu Ala Leu Glu Ala Asp Met Thr Lys Trp
260 265 270

Glu Gln Lys Tyr Leu Glu Glu Asn Val Met Arg His Phe Ala Leu Asp
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Ile Lys Val Leu Gln Gln Arg Ser Arg Lys Glu Pro Ser Lys Thr Glu
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Gln Leu Ser Cys Met Arg Pro Ala Lys Ser Leu Met Ser Ile Ser Asn
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Ala Gly Ser Gly Leu Leu Ser His Ser Ser Thr Leu Thr Gly Ser Pro
385 390 400
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Ser Pro Val Pro Pro Ser Thr Pro Leu Leu Ser Ala His Ser Lys Thr
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Lys Thr Ala Ala Val Ala Pro Ile Ser Val Pro Ala Pro Val Ala Ala
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Gln Val Ala Pro Ala Ala Pro Ala Pro Val Pro Ala Pro Ala Leu Val
565 570 575
Pro Val Pro Ala Pro Ala Ala Gln Ala Ser Ala Pro Ala Gln Thr
580 585 590
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615

620

Gly Pro Gly Pro His Arg Leu Ser Ile Pro Ser Leu Thr Cys Asn Pro
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Asp Lys Thr Asp Gly Pro Val Phe His Ser Asn Thr Leu Glu Arg Lys
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Tyr Leu Ile
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<400> 4

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35 40 45

Ala Ala Pro Ala Ala Ala Ala Pro Ser Pro Ala Thr Ala Ala Ala
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Thr Ala Ala Ala Val Ser Pro Ala Ala Ala Gly Gln Ile Pro Ala Ala
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Ala Ser Val Ala Ser Ala Ala Ala Val Ala Pro Ser Ala Ala Ala Ala
85 90 95

Ala Ala Val Gln Val Ala Pro Ala Ala Pro Ala Pro Val Pro Ala Pro
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<213> Artificial Sequence

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<223> Description of Artificial Sequence: oligonucleotide
primer for PCR reaction

<400> 5	
tacggatccg aatcgaacaa aactgcagct g	31
<210> 6	
<211> 32	
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<213> Artificial Sequence	
<220>	
<223> Description of Artificial Sequence:oligonucleotide primer for PCR reaction	
<400> 6	
atactcgagt catggagctg gagttggagc ca	32
<210> 7	
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gttgacctg caatccagac aa	22
<210> 8	
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<400> 8	
cccaggatct gaatgggagt t	21
<210> 9	
<211> 25	
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<213> Artificial Sequence	
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<400> 9	
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<210> 10
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:oligonucleotide primer for RACE PCR reaction

<400> 10
gctgacagtt gccctgacgc tgct

24

<210> 11
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:oligonucleotide primer for RACE PCR reaction

<400> 11
cgaggacggt gctctagctg ctca

24

<210> 12
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<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:oligonucleotide primer for RACE PCR reaction

<400> 12
tccttccaac tcttgccctca agttccg

27

<210> 13
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:oligonucleotide primer for RACE PCR reaction

<400> 13
ggtgttcgtcg gacaggcagg atac

24

<210> 14
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:oligonucleotide
primer for RACE PCR reaction

<400> 14
gaggcggaga gaactaagag aaga

24

<210> 15
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<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:oligonucleotide
primer for RACE PCR reaction

<400> 15
gagcggagat ggaggagtaa ttca

24